Fluid Power Capabilities

Wineman Technology is an industry leader in fluid power test systems. From building complex avionic systems to testing a single critical component, our solutions are designed and built to maximize performance and reliability. By applying sound engineering, creativity, and a full understanding of the customer’s testing needs, we develop custom turnkey test stands for system, sub-system, or component-level products or machinery modernization. We also provide high levels of flexibility using commercial off-the-shelf technologies.

We match each physical test system with high performance controls, from simple open loop PC- or PLC-based controls to embedded real-time systems utilizing the latest innovations in control and instrumentation hardware. Many customer solutions include cutting-edge FPGA and system technologies that marry multiple control platforms.

The heart of any good control system is the application software. Whether developing a custom LabVIEW™ application to meet a specific requirement or using our proven INERTIA™ control and automation suite, our solutions always provide an intuitive, highly flexible test environment with overall capabilities previously unattainable at its cost point.

Impulse Pressure Test Stands

Wineman Technology Inc. provides state-of-the-art, custom Impulse Pressure Test Stands for all industries. From small tabletop or portable systems to multiple unit chambers, Wineman Technology can provide a system to meet all of your testing requirements.

Standard Test Parameters Include:

- A variety of test fluids to meet your product testing applications
- Test fluid pressures up to 60,000 psi
- System flow rates up to 200 gpm
- Test frequencies up to 10 Hz
- Pressure profiles from simple square waves to the more complex 20-point aerospace wave forms

www.winemantech.com
sales@winemantech.com Phone: (989) 771-3000
WINEMAN TECHNOLOGY IMPULSE PRESSURE TEST STAND CAPABILITIES *

Control:
- Wineman Technology’s standard or custom real-time process control utilizing National Instruments LabVIEW™ software and Horner PLC solutions
- 19-inch monitor, mouse, and keyboard

Test Chamber:
- Test chambers with horizontal or vertical orientation designed to suit the unit under test (UUT) size, number of UUTs being tested, and UUT weights
- Portable to fixed placement systems
- Perforated work surface designed to capture, filter, and reuse lost fluid

Power:
- Single- or three-phase power systems with 110 VAC or 24 VDC control power

Testing Fluids:
- Air, water, glycol mixtures, oils, phosphate esters, and AFT fluids among others

Test Pressures:
- 500 psi, 1,000 psi, 3,000 psi, 5,000 psi, 10,000 psi, 14,500 psi, 20,000 psi, 30,000 psi, 40,00 psi, and 60,000 psi service rated systems
- Pressure rate of rise curves to suit your application

Input Flows:
- Input flow rates up to 200 gpm

WTI Impulse System Standard Software Package:
- Proof, proof then impulse, and impulse to burst testing modes
- PC-based control system utilizing National Instruments hardware
- Automatic, manual, and learn-in modes
- Standard test screen that provide entry points for part serial number or test ID number, part description, technician ID and comments, lab report number, and selection of a previously created test profile (created in test configuration screen)
- Indicator screen that provides annunciating system safety interlocks, system faults, and display of system pressure versus time
- Test sequences that run to either completion or to a detection of a fault
- Preset or user-configurable pressure test frequencies, ramp rates (psi/sec), stepped pressure control, hold times, maximum pressure selections, and control point selection
- Data that is automatically sequenced and stored with references to the test date
- Collected data that is saved and downloadable as delimited text files for easy access with Microsoft Excel
- Wineman Technology’s standard or custom data reporting and charts

Standard Options:
- Available options include combination impulse, pressure pulsation, and burst test stands
- Temperature-controlled test chambers and fluid temperature control (FTC) systems from -40°F to 350°F
- Observation windows or interior high speed cameras
- Carbon steel or stainless steel fluid systems and chambers
- Test sumps for submerged testing
- Test frames or fixtures to suit
- Multiple or isolated UUT channels for parallel UUT testing
- On-board or facility fluid supply systems
- Manual or automatic part filling and purging
- Tests in accordance to SAE, API, ISO, APR, ASTM, etc.
- On-board printer

*Specifications subject to change without notice.